

Notice of Allowability

Application No.

09/883,683

Examiner

Curtis B. Odom

Applicant(s)

ZHU ET AL.

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt filed on 3/14/2005.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S STATEMENTS OF REASONS FOR ALLOWANCE

1. Claims 1-13 are allowable over prior art references because related references do not disclose modifying digital coefficients of a filter at a relay station by receiving a master signal, modifying the master signal to produce a second signal, and transmitting the second signal, wherein the transmission of the second signals is interrupted to estimate an interference of the signal and store the estimate; after resuming transmission of the second signal, modifying the digital coefficients of the filter. Claims 14, 19, and 22 are allowable over prior art references because related references do not disclose modifying digital coefficients of a filter at a relay station by receiving a master signal, modifying the master signal to produce a second signal, and transmitting the second signal, wherein the coefficients are modified by deriving a Fourier transform of the second signal; deriving correction values based on the Fourier transform; transforming the correction values using an IFFT; and modifying the filter coefficients based on the transformed correction values. Claims 15, 20, and 23, allowable over prior art references because related references do not disclose modifying digital coefficients of a filter at a relay station by receiving a master signal, modifying the master signal to produce a second signal, and transmitting the second signal, wherein the coefficients are modified by deriving an estimate of differences between consecutive segments of the master signal; estimating an error in the estimation of the differences; and modifying the filter coefficients to reduce the estimated error. Claims 16-18, and 21 are allowable over prior art references because related references do not disclose modifying digital coefficients of a filter at a relay station by receiving a master signal, modifying the master signal to produce a second signal, and transmitting the second signal,

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wherein a switch selectively transmits the second signal and can be controlled not to transmit the second signal when it is desired to estimate multipath interference in the master signal.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Namiki (U. S. Patent No. 4, 701, 935) and Lovinggood et al. (U. S. Patent No. 6, 697, 603) discloses repeater (relay) stations which include filtering a received signal.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Curtis Odom

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March 10, 2006

A handwritten signature in black ink, appearing to read "J. K. Patel", with a stylized flourish at the end.

JAY K. PATEL
SUPERVISORY PATENT EXAMINER